

**PROSPECTIVE PURCHASER COMPLIANCE STATUS REPORT**

**FORMER SIBLEY MILL PROPERTY  
1721, 1717 & 1705 GOODRICH STREET  
AUGUSTA, GA 30901**

**October 4, 2017**

**Prepared For:**

Augusta Canal Authority  
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**Submitted By:**

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**GROUNDWATER SCIENTIST STATEMENT**

*I certify that I am a qualified ground-water scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by myself or by a subordinate working under my direction.*

*Carrie Williams*

Carrie Williams, P.G.  
Georgia Professional Geologist  
License No. 1780

9/18/2017

Date

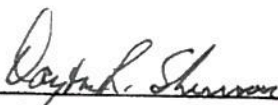


**COMPLIANCE STATUS CERTIFICATION**

*I certify under penalty of law that this report and all attachments were prepared under my direction in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

*Based on my review of the findings of this report with respect to the risk reduction standards of the Rules for Hazardous Site Response, Rule 391-3-19-.07, I have determined that this Property is in compliance with the following Risk Reduction Standards for soil:*

- *Richmond County Tax Parcel 035-2-031-00-0 - Meets Type 3 and/or Type 4 soil RRS.*
- *Richmond County Tax Parcel 027-4-094-00-0 – Meets Type 1 and/or Type 2 soil RRS (except soil sample "BG11" [located beneath concrete] does not meet any RRS for lead).*
- *Richmond County Tax Parcel 027-4-096-00-0 – Meets Type 3 and/or Type 4 soil RRS; except Area "G-1,2" which meets a Type 5 soil RRS and soil samples "BG8" through "BG10", "GP39" and "GP46" (located beneath concrete) do not meet any RRS for select SVOCs. Additionally, soil sample "BG10" does not meet Type 1 – 4 soil RRS for arsenic.*

  
\_\_\_\_\_  
Signature

*Executive Director*  
\_\_\_\_\_  
Title

*October 2, 2017*  
\_\_\_\_\_  
Date

## 1. INTRODUCTION

American Environmental & Construction Services, Inc. ("AECS") has prepared this Prospective Purchaser Compliance Status Report ("PPCSR" or "Report") on behalf of the Augusta Canal Authority ("ACA") for the Former Avondale Mills-Sibley Plant ("Former Sibley Mill") property located at 1721 Goodrich Street, Augusta, Richmond County, Georgia ("Property"). This Report is being submitted to the Georgia Environmental Protection Division ("EPD") in fulfillment of Section 12-8-207(b)(6) of the Hazardous Site Reuse and Redevelopment Act which requires that a PPCSR be submitted upon completion of Prospective Purchaser Corrective Action Plan ("PPCAP") activities.

A PPCAP for the Property was submitted to EPD on August 6, 2010, and subsequently approved on August 26, 2010. The PPCAP presented a plan for additional soil investigation and excavation of soils not meeting applicable Risk Reduction Standards ("RRS"). PPCAP implementation activities began at the Property in 2011 and ended in 2016. Project Summary Letters describing corrective actions at the Property have been submitted annually to EPD. A comprehensive Response Action Report ("RAR") was submitted to EPD in February 2015. The RAR detailed the first phase of soil excavation activities at the Property in Areas A, B, C, D, E and G. The locations of Areas A, B, C, D, E & G are shown in **Figures 5 and 5a**. The RAR report is provided in **Appendix G** of this Report (electronic copy only).

Areas A, B, C, D, E, and G meet residential soil RRS, except as described in the PPCAP Addendum dated March 30, 2015 (refer to **Figure 5a**). A PPCAP Addendum was submitted to EPD on March 30, 2015 proposing the designation of a portion of Area C as meeting non-residential soil RRS and a portion of Area G (i.e., Grid G-1,2) as a proposed Type 5 RRS area. In fulfillment of Type 5 RRS requirements, an Environmental Covenant and a Monitoring and Maintenance Plan (MMP) for the Type 5 RRS area were submitted to EPD on July 18, 2016.

The second (and last) phase of excavation activities at the Property began in Area F in 2016 (refer to **Figure 5b**). Previously, in December 2015, a second PPCAP ("PPCAP Addendum #2") was submitted to EPD, which revised the proposed excavation plan for area F and also proposed additional delineation soil sampling in Area F to address data gaps. The second phase of excavation and confirmation sampling activities in Area F ended in July 2016. All soil in Area F meets non-residential RRS (refer to **Figure 5a**). Details regarding the corrective action activities in Area F are provided in **Section 4** of this Report.

**Figure 5a** of this Report shows all excavation areas with the tax parcel boundaries superimposed and colored areas indicating soil RRS compliance.

### 1.1 Property Description

The subject Property is located at 1721, 1717 and 1705 Goodrich Street in Augusta, Richmond County, Georgia and consists of a former industrial textile manufacturing mill comprised of numerous buildings totaling approximately 518,000 square feet in area. A site location map showing the relevant portion of the United States Geologic Survey ("USGS") topographic map is provided in **Figure 1**.

This PPCSR certifies soil on the following Richmond County tax parcels: 027-4-094-00-0, 027-4-096-00-0 and 035-2-031-00-0 for a total of 15.33 acres as shown in **Figures 3 and 5a**.

## **1.2     Background**

In contemplation of purchasing the Property, ACA commissioned updates to the existing Phase I & Phase II Environmental Site Assessments ("ESAs") performed in August 2007 and March 2008, respectively, by Advanced Environmental Options, Inc. ("AEO"). Phase II ESA data collected by AEO are summarized in **Appendix A** and a copy of the *Phase II Environmental Assessment Report Dated October 2007* is provided in **Appendix H** of the Report (electronic copy only).

As part of PPCAP preparation activities, AECS utilized the Phase II ESA soil data and performed supplemental soil sampling activities at the Property to establish the approximate limits of the proposed excavation areas.

In 2010, AECS advanced eighty-three (83) soil borings at various locations throughout the Property as shown in **Figures 6 and 7**. The surface and subsurface soil samples collected from the borings were analyzed for Volatile Organic Compounds ("VOCs"), Semi-Volatile Organic Compounds ("SVOCs"), Resource Conservation and Recovery Act ("RCRA") metals, pesticides, and poly chlorinated biphenyls (PCBs). The analytical results for the supplemental soil sampling activities are summarized in Tables found in **Appendix A**.

The 2010 supplemental soil sampling activities confirmed the following contaminants of concern ("COCs") in surface and/or subsurface soils at the Property:

- Arsenic,
- Barium,
- Cadmium;
- Chromium,
- Lead;
- Mercury;
- Selenium;
- Zinc;
- Benzo[a]anthracene;
- Benzo[a]pyrene;
- Benzo[b]fluoranthene;
- Benzo[k]fluoranthene
- Chrysene;
- Dibenz[a,h]anthracene;
- Indeno[1, 2, 3-cd]pyrene;
- Phenanthrene;

- Tetrachloroethene;
- Trichloroethene; and
- Ethylbenzene.

Figures showing all soil sampling locations and corresponding detections of regulated substances in excess of Type 1 residential soil RRS (prior to corrective action activities) are provided in **Figures 6 and 7**. **Figure 6** presents soil delineation data for the entire Property; whereas **Figure 7** presents soil delineation data specific to Areas E, F and G.

### 1.3 Groundwater Conditions

In August 2007, as part of Phase II ESA investigation activities, AEO converted several soil borings into one (1)-inch monitoring wells at soil boring locations GP1, GP-9, GP-20 and GP-57, as described in the *Report of Phase II Environmental Site Assessment (AEO)* dated October 2007 (**Appendix H** of this Report). According to the report, free product (described as "thick #6 fuel oil") was encountered at approximately ten (10) feet below ground surface ("bgs") in monitoring well GP-9, therefore, the monitoring well was not sampled. The remaining three (3) monitoring wells were sampled for RCRA metals, SVOCs and VOCs, with the results provided in the *Report of Phase II Environmental Site Assessment* (Table 2-4) and re-summarized in **Table 4** of this Report. The monitoring well locations are shown in **Figure 14**.

The groundwater sampling results from August 2007 indicated a release of benzene, toluene, ethylbenzene, and xylene ("BTEX") constituents and naphthalene at monitoring well GP-1, which is located in the vicinity of a former 500-gallon gasoline underground storage tank (UST) in the southeast corner of the Property. Xylene was detected at a concentration of 16.2 µg/L in monitoring well GP-20 and was less than ("<") the practical quantitation limit ("PQL") for all other VOCs and SVOCs. No VOCs or SVOCs were detected in monitoring well GP-57. All three (3) monitoring wells had detections of RCRA metals, with exceedences of Type 1 groundwater RRS for arsenic, cadmium, chromium, and lead found in monitoring wells GP-20 and GP-57.

In March 2008, AEO performed additional groundwater investigation activities at the Property, the results of which were provided in a report entitled, *Report of Additional Phase II Environmental Activities* dated April 2008 (**Appendix I**). Eleven (11) monitoring wells were advanced throughout the Property. The locations of the monitoring wells are provide din **Figure 14** of this Report. The depths of the monitoring wells ranged from 3 to 17 feet bgs. According to the report, VOCs were detected in groundwater samples from monitoring wells MW-1, MW-2, MW-3 and MW-5. No PAHs were detected in the monitoring wells; however, the majority of the monitoring wells had detections of RCRA metals and mercury. The analytical data are summarized in **Table 4, 4a and 4b** of this Report and are also found in the *Report of Additional Phase II Environmental Activities* (**Appendix I**).

A Corrective Action Plan (CAP) Part A was prepared in 2008 for Avondale Mills, Inc. by AEO. The CAP Part A was prepared following the discovery of soil with strong petroleum odor, staining and product in soil borings advanced during the Phase II ESA around the sides of a 3,000-gallon #6 fuel oil UST located in the northeast corner of the Property.

As part of CAP Part A groundwater activities, AEO installed additional monitoring wells MW-15, MW-16 and MW-17 in the vicinity of the 3,000-gallon fuel oil UST and analyzed groundwater samples for SVOCs. No SVOCs were detected in the monitoring wells.

On March 3, 2010, the Solid Waste Management Program issued a No Further Action status letter for the petroleum release associated with the 3,000-gallon #6 fuel oil AST closure. A copy of the letter is provided in **Appendix J** of this Report.

## **2. SOIL RISK REDUCTION STANDARDS**

The main objective of the PPCAP was to detail a plan to bring soil at the Property into compliance with applicable RRSs. Both site-specific and default residential and non-residential soil RRS values (i.e., Type 1, 2, 3 and 4 RRS values) were calculated for all COCs identified in soil at the Property. The proposed Type 1 through 4 soil RRS were submitted to EPD in the RAR dated February 2015 (**Appendix G**). The protection of groundwater component of the site-specific Type 2 and Type 4 soil RRS were calculated using a Dilution Attenuation Factor (DAF) of 1 for all COCs, except barium where a DAF of 20 was applied. A table summarizing the soil RRS values is provided in **Table 1**. All RRS calculations and supporting documentation were provided as an attachment in the RAR submittal.

## **3. SAMPLING AND CORRECTIVE ACTION ACTIVITIES**

All field activities were performed in accordance with the Generic and Site-Specific Quality Assurance Project Plan-2A (QAPP) dated January 10, 2016, the approved PPCAP dated July 8, 2010, the PPCAP Addendum #2 dated December 2015, and PPCAP Addendum #3 dated August 8, 2016.

## **4. EXCAVATION AREAS**

### **4.1 Excavation Areas A, B, C, D, E and G**

Comprehensive details of the first phase of excavation activities in Areas A, B, C, D, E and G has been provided to EPD in the RAR dated February 2015 (**Appendix G**). Pre-excavation data for the Areas are provided in **Appendix A** of this Report. Soil confirmation analytical data are provided in Tables **2, 2a** and **2b** of the RAR.

### **4.2 Excavation Area F**

As described in both the PPCAP Addendum #2 and the Generic and Site-Specific QAPP, fifteen (15) soil borings were advanced at various locations throughout Area F on April 20, 2016, in order to address data gaps. All soil samples were analyzed for VOCs, SVOCs, RCRA Metals and mercury. The soil sampling locations are shown in **Figure 8**.

Surface soil samples (i.e. <2 ft. bgs) were collected at all soil boring locations (soil borings F21 through F35). Subsurface soil samples (collected at approximately 4 ft. bgs) were obtained from borings F21, F28,

F29, F30 and F34. Subsurface soil samples from the remaining borings could not be collected because soil material could not be retrieved from the split spoon sampler due to the presence of fill material such as brick, coal, and ash. The Boring Logs are provided in **Appendix B**. Soil analytical results for the additional soil samples collected in Area F are provided in **Tables 2, 2a and 2b**.

Following review of the additional soil delineation data, Grids F23, F25, F26, F27, F28, F29, F30, F31, F32, F33 and F34 were added to the excavation plan. Pre-excavation soil sampling locations and the corresponding detections of regulated substances in excess of residential RRS, are provided in **Figure 8**.

In addition to the COCs identified in 2010 (refer to **Section 1.2**), the supplemental soil delineation activities in Area F confirmed the following additional COCs in surface and/or subsurface soils at the Property:

- Antimony;
- Copper;
- Thallium; and
- Methylene chloride.

#### *4.2.1 Area F – North Portion Excavation*

Area F is located along the eastern edge of the Property, between Building #5 and the levee/Riverwatch Parkway as shown in **Figure 9a**. The north portion of Area F is east of Building #14. Prior to excavation activities this area was covered with concrete and gravel. As part of delineation activities performed in 2010 and 2016, respectively, four (4) soil borings (i.e., F10, F11, F34 and F35) were advanced in the area. Cadmium, chromium and lead were detected at elevated concentrations in a surface soil sample collected at soil boring F10. Methylene chloride was detected at an elevated concentration in a surface soil sample collected at soil boring F34. Analytical data for this portion of Area F are provided in **Tables 3, 3a and 3b** of this Report.

The 2007 Phase II ESA investigation of this area detected lead above the residential soil RRS in a single subsurface soil sample (GP28 - lead 79.3 mg/kg) [refer to **Table 12** in **Appendix A**]. In 2010 and 2016, the detections for metals in this portion of Area F were in excess of the residential RRS, but met the non-residential RRS.

In accordance with the QAPP and PPCAPs, impacted soil not meeting the residential RRS was excavated at F10, F34 and the Dye grid area. Grid "GP28" (identified during the Phase II ESA) was excavated to a non-residential RRS endpoint. Generally, a 25-ft. by 25-ft. excavation grid was drawn around each sample point exceeding applicable RRS. Excavation activities were initiated in the north portion of Area F on April 21, 2016. All impacted soils were excavated, stockpiled, sampled and disposed of at Deans Bridge Road Municipal Solid Waste ("MSW") Landfill in Augusta, Georgia. Soils from grids F10 and GP28 were placed in Stockpile #1, for soil impacted with metals. Soils from grid F34 and the Dye grid were placed in Stockpile #2, for soil impacted with metals, VOC and SVOC. Copies of the waste disposal profiles and manifests are provided in **Appendix E**.

